



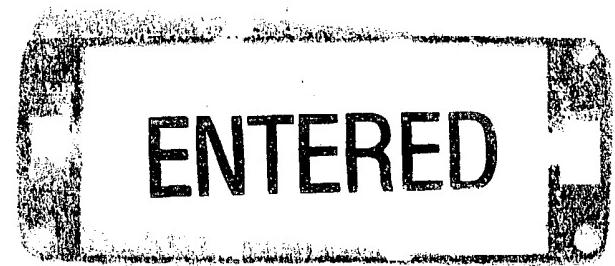
IFWO

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/812,782**

**DATE: 09/17/2004**  
**TIME: 16:56:14**

**Input Set : A:\PTO.FG.TXT**  
**Output Set: N:\CRF4\09172004\J812782.raw**

3 <110> APPLICANT: Liew, Choong-Chin  
 5 <120> TITLE OF INVENTION: Method for the Detection of Rheumatoid Arthritis Related  
 Gene Transcripts  
 6 in Blood  
 W--> 7 <130> FILE REFERENCE: 4231/2055H  
 9 <140> CURRENT APPLICATION NUMBER: 10/812,782  
 10 <141> CURRENT FILING DATE: 2004-3-30  
 12 <150> PRIOR APPLICATION NUMBER: US 10/802,875  
 13 <151> PRIOR FILING DATE: 2004-03-12  
 15 <150> PRIOR APPLICATION NUMBER: US 10/601,518  
 16 <151> PRIOR FILING DATE: 2003-06-20  
 18 <150> PRIOR APPLICATION NUMBER: US 10/268,730  
 19 <151> PRIOR FILING DATE: 2002-10-09  
 21 <150> PRIOR APPLICATION NUMBER: US 10/085,783  
 22 <151> PRIOR FILING DATE: 2002-02-28  
 24 <150> PRIOR APPLICATION NUMBER: US 09/477,148  
 25 <151> PRIOR FILING DATE: 2000-01-04  
 27 <150> PRIOR APPLICATION NUMBER: US 60/271,955  
 28 <151> PRIOR FILING DATE: 2001-02-28  
 30 <150> PRIOR APPLICATION NUMBER: US 60/305,340  
 31 <151> PRIOR FILING DATE: 2001-07-13  
 33 <150> PRIOR APPLICATION NUMBER: US 60/275,017  
 34 <151> PRIOR FILING DATE: 2001-03-12  
 36 <150> PRIOR APPLICATION NUMBER: US 60/115,125  
 37 <151> PRIOR FILING DATE: 1999-01-06  
 39 <160> NUMBER OF SEQ ID NOS: 112  
 41 <170> SOFTWARE: PatentIn version 3.2  
 43 <210> SEQ ID NO: 1  
 44 <211> LENGTH: 110  
 45 <212> TYPE: DNA  
 46 <213> ORGANISM: Human  
 48 <400> SEQUENCE: 1  
 49 acacaacgta acaataaacat atttagccaa tggtagagac tgcttatataa tacatttagag 60  
 51 tgtcaattca ttccgtttac agccccattg ggtgtcaaat tttttttgtt 110  
 54 <210> SEQ ID NO: 2  
 55 <211> LENGTH: 530  
 56 <212> TYPE: DNA  
 57 <213> ORGANISM: Human  
 60 <220> FEATURE:  
 61 <221> NAME/KEY: misc\_feature  
 62 <222> LOCATION: (16)..(16)  
 63 <223> OTHER INFORMATION: n is a, c, g, or t  
 65 <220> FEATURE:  
 66 <221> NAME/KEY: misc\_feature



6-7  
JW

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004  
TIME: 16:56:14

Input Set : A:\PTO.FG.TXT  
Output Set: N:\CRF4\09172004\J812782.raw

67 <222> LOCATION: (19)..(19)  
68 <223> OTHER INFORMATION: n is a, c, g, or t  
70 <220> FEATURE:  
71 <221> NAME/KEY: misc\_feature  
72 <222> LOCATION: (25)..(25)  
73 <223> OTHER INFORMATION: n is a, c, g, or t  
75 <220> FEATURE:  
76 <221> NAME/KEY: misc\_feature  
77 <222> LOCATION: (38)..(38)  
78 <223> OTHER INFORMATION: n is a, c, g, or t  
80 <220> FEATURE:  
81 <221> NAME/KEY: misc\_feature  
82 <222> LOCATION: (40)..(40)  
83 <223> OTHER INFORMATION: n is a, c, g, or t  
85 <220> FEATURE:  
86 <221> NAME/KEY: misc\_feature  
87 <222> LOCATION: (42)..(42)  
88 <223> OTHER INFORMATION: n is a, c, g, or t  
90 <220> FEATURE:  
91 <221> NAME/KEY: misc\_feature  
92 <222> LOCATION: (44)..(44)  
93 <223> OTHER INFORMATION: n is a, c, g, or t  
95 <220> FEATURE:  
96 <221> NAME/KEY: misc\_feature  
97 <222> LOCATION: (64)..(66)  
98 <223> OTHER INFORMATION: n is a, c, g, or t  
100 <220> FEATURE:  
101 <221> NAME/KEY: misc\_feature  
102 <222> LOCATION: (70)..(71)  
103 <223> OTHER INFORMATION: n is a, c, g, or t  
105 <220> FEATURE:  
106 <221> NAME/KEY: misc\_feature  
107 <222> LOCATION: (81)..(81)  
108 <223> OTHER INFORMATION: n is a, c, g, or t  
110 <220> FEATURE:  
111 <221> NAME/KEY: misc\_feature  
112 <222> LOCATION: (86)..(86)  
113 <223> OTHER INFORMATION: n is a, c, g, or t  
115 <220> FEATURE:  
116 <221> NAME/KEY: misc\_feature  
117 <222> LOCATION: (89)..(89)  
118 <223> OTHER INFORMATION: n is a, c, g, or t  
120 <220> FEATURE:  
121 <221> NAME/KEY: misc\_feature  
122 <222> LOCATION: (117)..(117)  
123 <223> OTHER INFORMATION: n is a, c, g, or t  
125 <220> FEATURE:  
126 <221> NAME/KEY: misc\_feature  
127 <222> LOCATION: (121)..(121)

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004  
TIME: 16:56:14

Input Set : A:\PTO.FG.TXT  
Output Set: N:\CRF4\09172004\J812782.raw

128 <223> OTHER INFORMATION: n is a, c, g, or t  
130 <220> FEATURE:  
131 <221> NAME/KEY: misc\_feature ✓  
132 <222> LOCATION: (123)..(123)  
133 <223> OTHER INFORMATION: n is a, c, g, or t  
135 <220> FEATURE:  
136 <221> NAME/KEY: misc\_feature ✓  
137 <222> LOCATION: (135)..(135)  
138 <223> OTHER INFORMATION: n is a, c, g, or t  
140 <220> FEATURE:  
141 <221> NAME/KEY: misc\_feature ✓  
142 <222> LOCATION: (143)..(143) . ✓  
143 <223> OTHER INFORMATION: n is a, c, g, or t  
145 <220> FEATURE:  
146 <221> NAME/KEY: misc\_feature ✓  
147 <222> LOCATION: (177)..(177)  
148 <223> OTHER INFORMATION: n is a, c, g, or t  
150 <220> FEATURE:  
151 <221> NAME/KEY: misc\_feature ✓  
152 <222> LOCATION: (179)..(179)  
153 <223> OTHER INFORMATION: n is a, c, g, or t  
155 <220> FEATURE:  
156 <221> NAME/KEY: misc\_feature ✓  
157 <222> LOCATION: (181)..(181)  
158 <223> OTHER INFORMATION: n is a, c, g, or t  
160 <220> FEATURE:  
161 <221> NAME/KEY: misc\_feature ✓  
162 <222> LOCATION: (193)..(194)  
163 <223> OTHER INFORMATION: n is a, c, g, or t  
165 <220> FEATURE:  
166 <221> NAME/KEY: misc\_feature ✓  
167 <222> LOCATION: (209)..(210)  
168 <223> OTHER INFORMATION: n is a, c, g, or t  
170 <220> FEATURE:  
171 <221> NAME/KEY: misc\_feature ✓  
172 <222> LOCATION: (215)..(215)  
173 <223> OTHER INFORMATION: n is a, c, g, or t  
175 <220> FEATURE:  
176 <221> NAME/KEY: misc\_feature ✓  
177 <222> LOCATION: (217)..(217)  
178 <223> OTHER INFORMATION: n is a, c, g, or t  
180 <220> FEATURE:  
181 <221> NAME/KEY: misc\_feature ✓  
182 <222> LOCATION: (221)..(221)  
183 <223> OTHER INFORMATION: n is a, c, g, or t  
185 <220> FEATURE:  
186 <221> NAME/KEY: misc\_feature ✓  
187 <222> LOCATION: (228)..(228)  
188 <223> OTHER INFORMATION: n is a, c, g, or t

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004  
TIME: 16:56:14

Input Set : A:\PTO.FG.TXT  
Output Set: N:\CRF4\09172004\J812782.raw

190 <220> FEATURE:  
191 <221> NAME/KEY: misc\_feature  
192 <222> LOCATION: (233)..(233)  
193 <223> OTHER INFORMATION: n is a, c, g, or t  
195 <220> FEATURE:  
196 <221> NAME/KEY: misc\_feature  
197 <222> LOCATION: (236)..(236)  
198 <223> OTHER INFORMATION: n is a, c, g, or t  
200 <220> FEATURE:  
201 <221> NAME/KEY: misc\_feature  
202 <222> LOCATION: (243)..(243)  
203 <223> OTHER INFORMATION: n is a, c, g, or t  
205 <220> FEATURE:  
206 <221> NAME/KEY: misc\_feature  
207 <222> LOCATION: (251)..(254)  
208 <223> OTHER INFORMATION: n is a, c, g, or t  
210 <220> FEATURE:  
211 <221> NAME/KEY: misc\_feature  
212 <222> LOCATION: (270)..(270)  
213 <223> OTHER INFORMATION: n is a, c, g, or t  
215 <220> FEATURE:  
216 <221> NAME/KEY: misc\_feature  
217 <222> LOCATION: (272)..(272)  
218 <223> OTHER INFORMATION: n is a, c, g, or t  
220 <220> FEATURE:  
221 <221> NAME/KEY: misc\_feature  
222 <222> LOCATION: (274)..(275)  
223 <223> OTHER INFORMATION: n is a, c, g, or t  
225 <220> FEATURE:  
226 <221> NAME/KEY: misc\_feature  
227 <222> LOCATION: (283)..(283)  
228 <223> OTHER INFORMATION: n is a, c, g, or t  
230 <220> FEATURE:  
231 <221> NAME/KEY: misc\_feature  
232 <222> LOCATION: (292)..(293)  
233 <223> OTHER INFORMATION: n is a, c, g, or t  
235 <220> FEATURE:  
236 <221> NAME/KEY: misc\_feature  
237 <222> LOCATION: (299)..(299)  
238 <223> OTHER INFORMATION: n is a, c, g, or t  
240 <220> FEATURE:  
241 <221> NAME/KEY: misc\_feature  
242 <222> LOCATION: (303)..(303)  
243 <223> OTHER INFORMATION: n is a, c, g, or t  
245 <220> FEATURE:  
246 <221> NAME/KEY: misc\_feature  
247 <222> LOCATION: (307)..(307)  
248 <223> OTHER INFORMATION: n is a, c, g, or t  
250 <220> FEATURE:

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004  
TIME: 16:56:14

Input Set : A:\PTO.FG.TXT  
Output Set: N:\CRF4\09172004\J812782.raw

251 <221> NAME/KEY: misc\_feature  
252 <222> LOCATION: (312)..(312)  
253 <223> OTHER INFORMATION: n is a, c, g, or t  
255 <220> FEATURE:  
256 <221> NAME/KEY: misc\_feature  
257 <222> LOCATION: (319)..(319)  
258 <223> OTHER INFORMATION: n is a, c, g, or t  
260 <220> FEATURE:  
261 <221> NAME/KEY: misc\_feature  
262 <222> LOCATION: (324)..(325)  
263 <223> OTHER INFORMATION: n is a, c, g, or t  
265 <220> FEATURE:  
266 <221> NAME/KEY: misc\_feature  
267 <222> LOCATION: (328)..(329)  
268 <223> OTHER INFORMATION: n is a, c, g, or t  
270 <220> FEATURE:  
271 <221> NAME/KEY: misc\_feature  
272 <222> LOCATION: (342)..(342)  
273 <223> OTHER INFORMATION: n is a, c, g, or t  
275 <220> FEATURE:  
276 <221> NAME/KEY: misc\_feature  
277 <222> LOCATION: (345)..(345)  
278 <223> OTHER INFORMATION: n is a, c, g, or t  
280 <220> FEATURE:  
281 <221> NAME/KEY: misc\_feature  
282 <222> LOCATION: (366)..(366)  
283 <223> OTHER INFORMATION: n is a, c, g, or t  
285 <220> FEATURE:  
286 <221> NAME/KEY: misc\_feature  
287 <222> LOCATION: (377)..(377)  
288 <223> OTHER INFORMATION: n is a, c, g, or t  
290 <220> FEATURE:  
291 <221> NAME/KEY: misc\_feature  
292 <222> LOCATION: (382)..(382)  
293 <223> OTHER INFORMATION: n is a, c, g, or t  
295 <220> FEATURE:  
296 <221> NAME/KEY: misc\_feature  
297 <222> LOCATION: (391)..(391)  
298 <223> OTHER INFORMATION: n is a, c, g, or t  
300 <220> FEATURE:  
301 <221> NAME/KEY: misc\_feature  
302 <222> LOCATION: (395)..(395)  
303 <223> OTHER INFORMATION: n is a, c, g, or t  
305 <220> FEATURE:  
306 <221> NAME/KEY: misc\_feature  
307 <222> LOCATION: (400)..(400)  
308 <223> OTHER INFORMATION: n is a, c, g, or t  
310 <220> FEATURE:  
311 <221> NAME/KEY: misc\_feature

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004  
TIME: 16:56:15

Input Set : A:\PTO.FG.TXT  
Output Set: N:\CRF4\09172004\J812782.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:2; N Pos. 16,19,25,38,40,42,44,64,65,66,70,71,81,86,89,117,121,123,135  
 Seq#:2; N Pos. 140,177,179,181,193,194,209,210,215,217,221,228,233,236,243  
 Seq#:2; N Pos. 251,252,253,254,270,272,274,275,283,292,293,299,303,307,312  
 Seq#:2; N Pos. 319,324,325,328,329,342,345,366,377,382,391,395,400,412,413  
 Seq#:2; N Pos. 422,424,426,433,439,442,452,460,463,471,495,500,504,516  
 Seq#:5; N Pos. 13,14,16,20,21,25,26,27,28,42,52,55,57,59,63,65,68,72,74,77  
 Seq#:5; N Pos. 91,102,117,127,128,169,172,192,203,243,244,248,249,253,283  
 Seq#:5; N Pos. 288,299,318,327,334,348,359,360  
 Seq#:6; N Pos. 475,556,559,585,606,644,671,693,695,714,742,744,756,765,768  
 Seq#:6; N Pos. 808,815,823,830,837  
 Seq#:10; N Pos. 433,600,615,626,645,661  
 Seq#:14; N Pos. 6,15,37,38,47,56,57,94,127,155,157  
 Seq#:16; N Pos. 5,15,39,47,52,69,154,207,217  
 Seq#:17; N Pos. 18,19,27,47,66,76,82,108,133,162,210,260,276  
 Seq#:19; N Pos. 17,40,59,76,107,165,189,216,221,230  
 Seq#:21; N Pos. 17,23,28,36,41,44,53,59,62,67,70,71,74,76,79,83,84,86,97  
 Seq#:22; N Pos. 2,17,37,52,53,56,77,85,89,96  
 Seq#:23; N Pos. 17,19,27,28,29,37,38,46,49,65,72  
 Seq#:24; N Pos. 5,13,71,88,91,109,157,177,199,207,211  
 Seq#:26; N Pos. 299,333,353,410,411,460,474,479  
 Seq#:27; N Pos. 348,422,435,476,490  
 Seq#:28; N Pos. 18,47,59,74,138,174,176,211  
 Seq#:29; N Pos. 1,2,12,29,34  
 Seq#:30; N Pos. 3,4,5,6,8,13,15,20,27,32,33,40,49,50,57,63,67,69,76,78,87  
 Seq#:30; N Pos. 89  
 Seq#:31; N Pos. 12,26,46,49,55,60,63,69,70,73,79,92,96  
 Seq#:32; N Pos. 2,7,27,34,57,63,64,67,73,75,76,77,78,80,90,96,97,98  
 Seq#:33; N Pos. 5,12,28,32,38,44,57,68,76,82,92  
 Seq#:34; N Pos. 3,21,27,28,38,47,50,53,61,73,78,83,85,97  
 Seq#:35; N Pos. 21,22,28,32,65,67,68,70,77,83,92  
 Seq#:36; N Pos. 4,8,29,43,44,46,57,59,84,98,115,117,118  
 Seq#:37; N Pos. 7,10,53,61,65,66,72,74,75,89,94,100,107,126,141  
 Seq#:38; N Pos. 2,10,61,63,72,79  
 Seq#:39; N Pos. 5,7,8,10,15,16,20,24,71  
 Seq#:40; N Pos. 80,91  
 Seq#:42; N Pos. 14,31,36,63,73,93,98  
 Seq#:44; N Pos. 2,11,27,28,34,38,39,41,49,50,61,62,67,68,76,79,80,85,89,93  
 Seq#:45; N Pos. 8,24,33,34,47,48,58,63,68,71,73,77,88,95,96  
 Seq#:46; N Pos. 74  
 Seq#:47; N Pos. 7,8,17,23,33,42,47,48,52,55,60,62,66,70,71,74,84,86,87,96  
 Seq#:47; N Pos. 99,100  
 Seq#:48; N Pos. 5,6,33,35,36,42,46,48,55,59,69,81,87,91,94,97  
 Seq#:49; N Pos. 20,38,164,178,201,211,274,305,340,346,386,387,405,433,446  
 Seq#:50; N Pos. 5,6,13,18,22,39,45,48,54,65,70,72,80,83,90,94,96,98,102,104

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004  
TIME: 16:56:15

Input Set : A:\PTO.FG.TXT  
Output Set: N:\CRF4\09172004\J812782.raw

Seq#:50; N Pos. 113,115,117,121,123,125,128,142,144,160,174,175,180,181,186  
Seq#:50; N Pos. 192,198,205,215,223,224,233,234,238,243,253,257,268,280,291  
Seq#:50; N Pos. 296,300,305,308,311,319,322,326,328,334,335,338,339,347,352  
Seq#:50; N Pos. 358,361,367,382,389,395,410,413,414,418,425,436,443  
Seq#:51; N Pos. 19,59,87,119,203,215,274,296,309,353,425,426,427,431,451  
Seq#:51; N Pos. 470,472,478  
Seq#:52; N Pos. 13,14,17,20,22,27,29,31,36,43,46,58,59,74,78,81,85,87,88,90

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004  
TIME: 16:56:15

Input Set : A:\PTO.FG.TXT  
Output Set: N:\CRF4\09172004\J812782.raw

L:7 M:283 W: Missing Blank Line separator, <130> field identifier  
L:10 M:256 W: Invalid Numeric Header Field, Wrong Current FILING DATE:YYYY-MM-DD  
L:386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0  
M:341 Repeated in SeqNo=2  
L:610 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0  
M:341 Repeated in SeqNo=5  
L:746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:420  
M:341 Repeated in SeqNo=6  
L:855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:420  
M:341 Repeated in SeqNo=10  
L:963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0  
M:341 Repeated in SeqNo=14  
L:1045 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0  
M:341 Repeated in SeqNo=16  
L:1121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0  
M:341 Repeated in SeqNo=17  
L:1212 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0  
M:341 Repeated in SeqNo=19  
L:1330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0  
M:341 Repeated in SeqNo=21  
L:1387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0  
M:341 Repeated in SeqNo=22  
L:1439 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0  
M:341 Repeated in SeqNo=23  
L:1506 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
M:341 Repeated in SeqNo=24  
L:1584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:240  
M:341 Repeated in SeqNo=26  
L:1637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:300  
M:341 Repeated in SeqNo=27  
L:1693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
M:341 Repeated in SeqNo=28  
L:1729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
L:1826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
M:341 Repeated in SeqNo=30  
L:1898 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0  
M:341 Repeated in SeqNo=31  
L:1970 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0  
M:341 Repeated in SeqNo=32  
L:2037 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0  
M:341 Repeated in SeqNo=33  
L:2114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0  
M:341 Repeated in SeqNo=34  
L:2171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0  
M:341 Repeated in SeqNo=35  
L:2238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0  
M:341 Repeated in SeqNo=36  
L:2317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0

VERIFICATION SUMMARY  
PATENT APPLICATION: US/10/812,782

DATE: 09/17/2004  
TIME: 16:56:15

Input Set : A:\PTO.FG.TXT  
Output Set: N:\CRF4\09172004\J812782.raw

M:341 Repeated in SeqNo=37  
L:2361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0  
M:341 Repeated in SeqNo=38  
L:2408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0